

CLAIMS

What is claimed is:

5 1. (currently amended) A computer program in combination
with a computer and a rotational grinding apparatus having a grinding wheel, a
blade and a regulating roller for enabling a user through a user interface to control
the rotational grinding apparatus to dress at least one of the grinding wheel, the
blade, and the regulating roller by using a wheel dressing roller supported on a
10 spindle and grind a workpiece, comprising:

means for displaying a computer screen on a monitor and for selecting an icon resembling a desired profile for dressing, said screen having at least one numerical data input value display window on the screen, wherein the value displayed in the at least one numerical data input value display window corresponds to a numerically controlled pattern of dressing, and wherein said pattern of dressing is variable by changing the value in the display window, whereby the computer will assign certain characters to certain input, and numerical algorithms and computer programs will automatically be programmed into the computer;

means for displaying a computer screen on a monitor and for selecting an icon resembling a desired profile for grinding, said screen having at least one numerical data input value display window on the screen, wherein the value displayed in the at least one numerical data input value display window corresponds to a numerically controlled pattern of grinding, wherein the value displayed in the at least one numerical data input value display window corresponds to a numerically controlled pattern of grinding, whereby the computer will assign certain characters to certain input, and numerical algorithms and computer programs will automatically be programmed into the computer, and wherein said pattern of grinding is variable by changing the value in the display window;

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means for accepting a value from the user and displaying the value in the value display window;

means for setting at least two grinding axes; and

means for initiating a grinding operation, coolant, and cycles;

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whereby selecting a value in the at least one value display window automatically directs the computer program to select a scripted computer program to control the grinding apparatus to in-situ dress and grind at least one of the grinding wheel, the blade and the regulating roller, and a workpiece in a desired configuration.

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2. (previously presented) The program according to claim 1, further comprising a means for changing the value in the at least one numerical data input value display window to increase or decrease the values displayed by using a mouse to scroll up and down a value list.

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3. (currently amended) A computer program in combination with a computer and a rotational grinding apparatus having a grinding wheel, a blade and a regulating roller for enabling a user through a user interface to control the rotational grinding apparatus to dress the regulating roller and to grind a workpiece, comprising:

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means for displaying a computer screen having at least one numerical data input value display window, wherein the value displayed in the value display window corresponds to a numerically controlled pattern of regulator dressing whereby the computer will assign certain characters to certain input, and numerical algorithms and computer programs will automatically be programmed into the computer, and wherein said pattern of dressing is variable by changing the value in the display window relating to a variable in the process of dressing the regulating roller;

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means for displaying a computer screen having at least one numerical data input value display window, wherein the value displayed in the value display window corresponds to a numerically controlled pattern of grinding, whereby the computer will assign certain characters to certain input, and numerical algorithms and computer programs will automatically be programmed into the computer, and wherein said pattern of dressing is variable by changing the value in the display window relating to a variable in the process of grinding;

whereby selecting numerical data input values in the value display windows automatically directs the computer to select a scripted computer program to control the grinding apparatus to in-situ dress and grind the regulating roller and the workpiece in a desired configuration.

4. (previously presented) The program according to claim 3, further comprising means for changing the value in the value display window to either increase or decrease the values.

5. (previously presented) The program according to claim 3, further comprising means for enabling modification of the accepted value.

6. (currently amended) A computer system with a computer screen for enabling the selection of a computer program by a user utilizing value display windows on the computer screen, the computer program being adapted and created for controlling a rotational grinding apparatus, the computer system also for compiling data so that the rotational grinding apparatus performs as the user specifies, the computer system comprising:

means for displaying a computer program screen on a monitor selecting an icon resembling a desired profile for dressing and grinding,

whereby the computer will assign certain characters to certain input, and numerical algorithms and computer programs will automatically be programmed into the computer, said screen having at least one numerical data input value display window on the computer screen which relates to a numerical variable in the process of grinding with a rotational grinding apparatus;

means for accepting a numerical value from the user and displaying the numerical value in the value display window;

means for setting at least two grinding axes; and

means for initiating a grinding operation, coolant, and cycles;

means for sending the accepted value to a computer program for operating the grinding apparatus; and

means for directing the computer to assign certain characters to certain input, and numerical algorithms and computer programs will automatically be programmed into the select a script computer program from the previous computer program containing the accepted value such that the computer program controls the grinding apparatus in a desired manner reflecting the numerical values entered into the value display windows.